Pay Item	Pay Unit
Structural Plate Pipe	Linear Foot, Lump Sum
Elliptical Structural Plate Pipe	Linear Foot, Lump Sum
Pipe Arch	Linear Foot, Lump Sum
Arch	Linear Foot, Lump Sum

This payment will be full compensation for all labor, equipment, and materials necessary to complete the work.

SECTION 650
REPAIR AND OVERLAY OF PORTLAND CEMENT CONCRETE BRIDGE DECKS WITH LOW-SLUMP CONCRETE OR LATEX-MODIFIED CONCRETE

650.01 DESCRIPTION.

This work consists of removing unsound concrete or chloride contaminated sound concrete with mechanical or hydrodemolition equipment and replacing and resurfacing the bridge deck with low-slump concrete or latex-modifed concrete.

650.02 MATERIALS.

A. **General.**

Item	Section
Class AAE-3 Concrete	802
Portland Cement	804.01
Concrete Admixtures	808
Burlap	810
Water	812
Fine Aggregate	816.01
Coarse Aggregate*	816.02

*Coarse aggregate for Portland Cement Concrete shall be crushed stone with at least 75% by weight of the particles retained on the No. 4 sieve having at least one fractured face. Aggregate shall meet Size No. 5.

B. **Special Requirements for Low-Slump Concrete.**

1. **Cement.** Type I or IA cement shall be used.

2. Basic absolute volume per Unit Volume of Concrete:

Coarse Aggregate (Size 5)	0.3121
Fine Aggregate	0.3121
Air	0.0600
Water	0.1603
Cement (Type I or IA)	0.1555
	1.0000

3. Approximate quantities of dry materials per cubic yard of concrete:

Coarse Aggregate (Size 5)	1,393 lbs.
Fine Aggregate	1,393 lbs.
Cement (8.75 bags)	823 lbs.

These quantities are based on the following assumptions:

Specific gravity of cement	3.14
Specific gravity of aggregate	2.65
Weight of one cubic foot of water	62.4 lbs.

4. An approved water-reducing admixture shall be used.

5. The slump measured using AASHTO T-119 shall not exceed one inch.

6. The concrete shall have an entrained air content of 6% with a tolerance of plus or minus 1%. The method of entraining air shall meet Section 802.01 D.

7. Grout for bonding the overlay to the existing concrete shall consist of equal parts, by weight, of Portland Cement and fine aggregate mixed with sufficient water to form a stiff slurry. The slurry shall have a consistency that permits application with a stiff brush or broom to a thin even coating that does not run or puddle in low spots. For sealing construction joints, the grout shall be thinned as necessary.

C. **Special Requirements for Latex-Modified Concrete.**

1. **Cement.** Type I cement shall be used.

2. **Latex Modifier.** Formulated latex modifier shall be a nontoxic, film forming, polymeric emulsion to which all stabilizers have been added at the point of manufacture and shall be homogeneous and uniform in composition.

Qualified technical assistance shall be made available by the latex manufacturer or supplier.

The latex modifier shall meet the following requirements:

Polymer Type	Styrene butadiene
Stabilizers	
(a) Latex	Nonionic surfactants
(b) Portland Cement Composition	Poly Dimethyl Siloxane
Percent Solids	46.0 – 49.0
Weight per gallon (pounds at 25^0 C.)	8.4
Shelf Life	2 years minimum
Color	White

The latex modifier shall be protected from extreme heat or cold and be stored in enclosures which prevents freezing and exposure to temperatures in excess of 85°F. Drums of latex modifier stored at the bridge site shall be covered both tops and sides with insulating blanket.

3. **Proportioning.** Latex-modified concrete shall be mixed by the following proportions:

Cement, sacks/cubic yard	7
Latex, gallon/sack cement	3.5 gal. (US)
Weight ratio (dry):	
Cement, sand, Coarse Aggregate =	1.0:2.8:1.7
Specific Gravity of Aggregates =	2.65+
Water*	

*Water may be added as required for a maximum of 6 inches. Testing of the slump shall be delayed from 4 to 5 minutes after the material has been dischared from the mixer. The slump shall be measured using AASHTO T-119.

4. Grout for sealing longitudinal construction joints shall consist of 1 part cement, 2 parts fine sand, and a 60/40 latex/water premix added to form a creamy consistency.

650.03 EQUIPMENT.

A. **Surfacing Preparation Equipment.** Surface preparation equipment shall be of the following types:

1. **Mechanical Equipment.**

a. Scarifying equipment shall meet Section 152.05 or 153.15.

b. Sawing equipment shall meet Section 153.12.

c. Sandblasting equipment shall remove rust scale from reinforcing bars and small chips of concrete partially loosened by milling. Air lines used for sandblasting or high pressure air blast shall be equipped with filters to remove all oil from the air.

d. Power driven hand tools such as pneumatic hammers shall not be heavier than the nominal 30-pound class and shall be operated at an angle of 45^0 or less measured from the slab. Chipping hammers heavier than a nominal 15-pound class shall not be used to remove concrete around or beneath reinforcing bars. Pointed bits for power hammers shall not be used except for full depth removal.

e. Hand tools such as hammers and chisels shall be used for removal of final particles of unsound concrete or to achieve the require depth.

2. Hydrodemolition equipment shall meet Section 153.16.

B. **Proportioning and Mixing Equipment.** Proportioning and mixing equipment shall be of a self-contained mobile type (not conventional ready-mix truck), meeting Section 153.02 C.

C. **Placing and Finishing Equipment.**

1. The finishing machine used for latex-modified concrete shall meet Section 153.09 B. The finishing machine used for low-slump concrete shall meet Section 153.09 C.

2. Placing and finishing equipment shall include hand tools for placing and brushing-in freshly mixed mortar, and for distributing material to the depth

that can be struck off with the screed. Hand operated vibrators and screeds shall be used to place and finish small areas of work.

3. A drag and a metal tining device meeting Section 602.03 B.2 shall be used for the final finish.

650.04 REMOVAL AND OVERLAY WITH THE USE OF MECHANICAL EQUIPMENT.

A. Classification of Overlays.

1. **Class 1 Overlay.** Class 1 overlay consists of removing deck concrete to a depth of 1/2 inch below the existing finished surface, except at drains and elsewhere as specified; disposing of the removed concrete; and overlaying with concrete to the depth specified. Thickness of the concrete overlay shall be measured from a level 1/2 inch below the original surface to the final raised surface as specified.

2. **Class 2 Overlay.** Class 2 overlay areas will be determined by the Engineer after Class 1 overlay has been accomplished. Class 2 overlay consists of removal, disposal, and replacement of concrete below the bottom of the Class 1 overlay. The lower limit of the Class 2 overlay shall be the top of the bars in the top layer of reinforcing steel. Concrete removed below the top of the top bar coincidental with Class 2 overlay is part of the Class 2 overlay area. The excavated volume shall be replaced with concrete to a level bounding the Class 1 overlay.

3. **Class 2-A Overlay.** Class 2-A overlay areas will be determined by the Engineer after Class 1 and Class 2 overlay have been accomplished. Class 2-A overlay consists of removal, disposal, and replacement of concrete around the periphery of reinforcing bars in the top mat. Class 2-A overlay will be ordered when an isolated bar has lost bond on more than 1/2 of it circumference. The excavated volume shall be replaced with concrete bounding the Class 2 overlay.

   Class 3 overlay may be ordered in lieu of Class 2-A overlay if damage to sound concrete between bars is suspected.

4. **Class 3 Overlay.** Class 3 overlay areas will be determined by the Engineer after Class 1 and Class 2 overlay have been accomplished. Class 3 overlay consists of removal, disposal, and replacement of concrete below the bottom of the Class 2 overlay to sound concrete or to a maximum depth bound by the top of the top bar of the bottom mat of reinforcing steel. The excavated volume shall be replaced with concrete to a level bounding the Class 2 overlay.

5. **Class 4 Overlay.** Class 4 overlay will be determined by the Engineer after Class 1, Class 2, and Class 3 overlay have been accomplished. Class 4 overlay consists of removal and disposal of concrete below the level described for Class 3 overlay and for the full remaining depth of the deck and replacement of the excavated volume with AAE-3 Portland Cement Concrete or low-slump concrete to a level bounding the Class 1 overlay.

   Edges of the full depth hole in the deck shall be nearly vertical or tapered inward from top to bottom. A reverse taper will not be permitted. The underside of the completed deck replacement shall have a neat, smooth appearance.

B. **Construction Requirements.**

1. **General.**

All concrete aggregate shall be available for sampling and testing, for a minimum of 5 days before lane closure. The Department is not responsible for delays or additional costs caused by failing aggregate.

Asphalt overlays shall be removed before any concrete removal. Asphalt removal equipment shall not damage the surface of the concrete deck.

To ensure proper overlay thickness, measurements shall be made from the finisher screed to the prepared deck surface.

The deck surface shall be sandblasted and cleaned with compressed air after grinding and concrete removal operations are completed. Wet sandblasting shall not be used.

All reinforcing steel shall be thoroughly sandblast cleaned of all deleterious material and concrete. Reinforcing bars which have lost 1/4 or more of their original dimensions shall be removed and replaced with a new lap-spliced bar. Reinforcing bars damaged due to removal operations shall be replaced at the Contractor's expense.

2. **Removal Requirements.**

a. **Class 1 Overlay.** The existing concrete deck area shall be uniformly ground to a depth of 1/2 inch. Removal to a greater depth shall be required at drains and other noted locations.

b. **Class 2 Overlay.** Concrete shall be removed by chipping or by a combination of grinding and chipping. Removal shall be considered to start 1/2 inch below the existing surface.

c. **Class 2-A Overlay.** Concrete shall be removed from around the periphery of the reinforcing steel using power hammers and hand tools without cutting, stretching, or damaging any exposed reinforcing steel. A minimum clearance of 3/4 inch around the bar shall be attained.

d. **Class 3 Overlay.** Concrete shall be removed by chipping with power hammers and hand tools without cutting, stretching, or damaging any exposed reinforcing steel.

e. **Class 4 Overlay.** This work consists of complete removal of that portion of the bridge deck which the Engineer designated for full depth removal. Forms shall be provided to enable placement of new concrete.

3. **Mixing of Materials.**

a. **Class AAE-3 Concrete.** Concrete shall be mixed according to Section 802.

b. **Low-Slump Concrete.** Concrete shall be mixed at the site. The mixing rate shall allow finishing operations to proceed at a steady rate.

c. **Latex-Modified Concrete.** Concrete shall be mixed at the site according to equipment requirements. The mixing rate shall allow finishing operations to proceed at a steady rate. Finishing must be completed before formation of a plastic surface film.

4. **Placing, Finishing, and Curing Overlay.**

a. **General.**

At longitudinal construction joints, the surface course previously placed shall be sawn to a straight and vertical edge before the adjacent course is placed.

After the machine finishing has been completed, hand finishing with a wood float may be required to produce a tight, uniform surface.

Immediately after finishing, all vertical joints with adjacent concrete shall be sealed by painting with a thinned grout before the curing operation begins.

A drag shall be pulled over the surface in a longitudinal direction while the concrete is plastic. It shall be immediately followed with a transverse metal tine finish. The tining shall be stopped 18 inches from the face of the curb. The tining device shall be drawn transversely across the full width of the pavement without overlapping passes. The tining shall be neat and uniform, and shall produce grooves without tearing the surface or bringing course aggregate to the surface. The finished surface shall be free from rough or porous areas and irregularities resulting from improper handling of the device. Concrete surfaces which do not meet the above requirements shall be corrected at the Contractor's expense by cutting transverse grooves in the hardened concrete with diamond-bladed equipment.

The surface tolerance of the finished concrete overlay shall be less than or equal to 3/16 inch in 10 feet. Measurements for smoothness will be taken on approximately 2-foot spacing over the entire deck. Any portion of the deck not meeting the tolerance shall be corrected by grinding or reoverlaying the deck. The tined surface texture shall be restored with diamond bit cutting equipment. Grinding or grooving that decreases the cover to less than 1 1/2 inches over the top of the reinforcing steel shall not be used.

b. **Special Requirements for Low-Slump Concrete.**

Concrete for Class 1, 2, 2-A, and 3 overlay areas may be placed in one operation.

Where full depth concrete is required, Class AAE-3 or low-slump concrete may be used. Concrete for the Class 4 overlay areas shall be struck off at the bottom level of Class 1 unless the Class 4 falls entirely with a Class 2 or 3 overlay area. In that case, the concrete shall match the prepared surface of either the Class 2 or 3 overlay area. The concrete shall receive the wet cure meeting Section 602.03 F.3 for at least 72 hours, and shall be sandblasted and cleaned before overlaying.

The prepared deck surface shall be dry to permit absorption of the bonding grout. All vertical and horizontal surfaces shall receive a thorough, even coating of bonding grout at a controlled rate so that grout does not dry before covering with new concrete.

The concrete shall be screeded to final grade and consolidated to 98% of the unit weight using ASSHTO T-121.

The surface shall receive a wet cure meeting Section 602.03 F.3 except that the curing period shall be 5 days. Concrete that is not wet cured within 30 minutes after placement shall be removed to the original prepared surface and replaced at the Contractor's expense.

c. **Special Requirements for Latex-Modified Concrete.**

Where Class 2, Class 3, or Class 4 overlay areas exist, Class AAE-3 concrete shall be used. The concrete shall be struck off at the bottom level of Class 1 overlay and left with a rough surface. After the concrete has been wet cured according to Section 602.03 F.3 for at least 72 hours, it shall be sandblasted and cleaned before overlaying.

The roadway surface shall be kept damp with water at least one hour before placing of new concrete. Puddles of free water shall be removed before covering with concrete.

The properly mixed latex composition shall be promptly delivered and deposited on the placement site and brushed onto the wetted, prepared surface. Care shall be exercised to ensure that all vertical and horizontal surfaces receive a thorough, even coating and that the rate of progress is controlled so the brushed material does not dry before covering with additional material as required for the final grade. The latex-modified concrete shall be struck off 1/4 inch above final grade, consolidated, and finished to final grade with vibrating screeders.

The surface shall receive a wet cure meeting Section 602.03 F.3 for at least 3 days. Concrete that is not wet cured within 30 minutes after placement shall be removed to the original prepared surface and replaced at the Contractor's expense.

5. **Limitations of Operations.**

No preparation work will be allowed until the lane or strip is closed for traffic. This lane shall remain closed until the overlay has been completed.

No loads other than equipment needed to remove and replace concrete shall be allowed on the deck that has undergone preparation before placement and curing of concrete. Mixers shall not be operated on the structure. Equipment used for transporting concrete shall not damage the prepared deck surface and shall be designed for transporting concrete. Equipment shall not leak oil, hydraulic fluid, or any other contaminant onto the prepared deck surface. Equipment used to transport mortar or concrete shall be of sufficient size and adequate design to handle the volume of material without spilling or dripping.

No vehicular traffic shall be permitted on the new overlay until the specified curing period is completed. If daily mean temperatures fall below 55°F. during the 5 days following concrete placement, additional curing days will be required.

When temperatures are above 80°F., placement shall be made at night or early morning hours by installing and operating necessary lighting. Rescheduling an overlay placement may be required if weather conditions adversely effect the quality of the overlay.

Overlays shall not be placed unless the temperature is 45°F. and rising.

Bridge deck overlays shall not be placed after September 15 unless authorized by the Construction Engineer.

C. **Method of Measurement.**

1. **Class 1, 2, 3, and 4 Overlay.** The quantities of Class 1, Class 2, Class 3, and Class 4 Overlay will be measured by the Square Yard. Removal of asphalt overlay will be incidental to this item.

2. **Class 2-A Overlay.** The quantity of Class 2-A Overlay will be measured in Linear Feet.

D. **Basis of Payment.**

1. Quantities measured will be paid for at the Contract Unit Price for the pay items shown. Payment will be full compensation for all labor, equipment, and materials necessary to complete the work. This includes removal, disposal, and replacement of all concrete for Class 1, 2, 2-A, 3, and 4 overlays.

   When there is no item for Class 4 overlay, payment will be made according to Section 104.03 D. Any Class 1, 2, 2-A, or 3 overlay authorized before Class 4 overlay, shall be paid for at the unit bid prices.

   No adjustment in unit bid prices, according to Section 104.03 B, will be made for Class 2, 2-A, 3, or 4 Overlays.

2. If it becomes necessary to increase the average thickness of the Class 1 overlay over that provided on the Plans, the following procedure will be used to determine compensation for the additional concrete required:

   Step 1: Before scarification, the existing deck elevations will be determined by longitudinal profiles taken along lines corresponding to the edges and mid-width of each overlay pour. The elevations along each profile will be measured to the nearest 0.01 foot at intervals not exceeding 10 feet.

   Step 2: The Engineer will establish and record the final grades for the surface of the Class 1 overlay. The difference between Plan grade and actual grade will be compared to determine the average increase in thickness of the overlay. This increase will be used to determine the volume of additional concrete.

Step 3: For the additional concrete, measured as provided in Step 2, payment will be made at the rate specified in the Price Schedule (PS-1) in the Proposal Form.

650.05 REMOVAL AND OVERLAY WITH THE USE OF HYDRODEMOLITION EQUIPMENT.

A. **Classification of Removal.**

1. **Class 1-H Removal.** Class 1-H removal will consist of that concrete removed by hydrodemolition equipment in the first pass after it is calibrated to remove 1/2 inch of sound concrete in a trial area as defined below. Concrete removed below the 1/2 inch depth coincidental with Class 1-H removal is considered a part of Class 1-H removal.

2. **Class 2-H Removal.** Class 2-H removal areas will be determined by the Engineer after Class 1-H removal has been accomplished. Class 2-H removal areas will consist of a second pass with the hydrodemolition equipment to remove and dispose the concrete below the bottom of the Class 1-H removal to sound concrete or to a maximum depth bound by the top of the top bar of the bottom mat of reinforcing steel. Concrete removed below the top of the top bar of the bottom mat of reinforcing steel coincidental with Class 1-H or 2-H removal is considered a part of Class 1-H or 2-H removal.

3. **Class 3-H Removal.** Class 3-H removal areas will be determined by the Engineer after Class 2-H removal has been accomplished. Class 3-H removal consists of a third pass with the hydrodemolition equipment to remove and dispose of concrete below the level described for Class 2-H removal and for the full remaining depth of the deck.

B. **Construction Requirements.**

1. **General.**

All concrete aggregate shall be available for sampling and testing for a minimum of 5 days before lane closure. The Department is not responsible for delays or additional cost caused by failing aggregate.

Asphalt overlays shall be removed before any concrete removal. Asphalt removal equipment shall not damage the surface of the concrete deck.

To ensure proper overlay thickness, measurements shall be made from the finisher screed to the prepared deck surface.

For Class 1-H removal, a trial area of approximately 30 square feet representing sound concrete will be designated by the Engineer to set the hydrodemolition equipment to remove 1/2 inch of sound concrete.

A second trial area of approximately 30 square feet of deteriorated concrete will be designated by the Engineer to test whether the setting of the hydrodemolition equipment will completely remove the unsound concrete.

If unsound concrete is not completely removed, the procedure shall be repeated on sound and deteriorated areas and the equipment shall be readjusted until unsound concrete is removed completely.

Sound concrete is defined as concrete free of chemical defects, delamination, spalling, cracks, etc.

Concrete in areas of limited accessibility shall be removed with hand-held hydrodemolition equipment or mechanical equipment. Any work to remove concrete in areas of limited accessibility or in occasional high spots shall be incidental to Class 1-H removal. This includes the area adjacent to the existing curbs.

2. **Removal Requirements.**

   a. **Class 1-H Removal.** The existing concrete deck area shall be removed by hydrodemolition to a minimum depth of 1/2 inch.

   b. **Class 2-H Removal.** After the Class 1-H removal, the area shall be cleaned. The surface shall be dry and the Engineer will sound the deck and mark any additional loose, unsound, deteriorated concrete. The machine shall be set for the complete removal of unsound concrete in the areas designated by the Engineer. Hydrodemolition of these areas is considered Class 2-H removal.

   c. **Class 3-H Removal.** This work consists of full depth removal of a portion of the bridge deck. Forms shall be provided to enable placement of new concrete.

   d. Removal of concrete debris shall be accomplished by hand or mechanical means, and shall be accomplished directly following the hydrodemolition process to prevent the debris from settling or adhering to the surface of remaining sound concrete. All debris which is allowed to adhere to the surface of sound concrete shall be removed with pressurized water. Care shall be exercised to avoid any damage to the remaining sound concrete. Debris shall be disposed of as provided in Section 202.02.

3. **Mixing of Materials.**

   a. **Class AAE-3 Concrete.** Concrete shall be mixed according to Section 802.

   b. **Low-Slump Concrete.** Concrete shall be mixed at the site. The mixing rate shall allow finishing operations to proceed at a steady rate.

   c. **Latex-Modified Concrete.** Concrete shall be mixed at the site according to equipment requirements. The mixing rate shall allow finishing operations to proceed at a steady rate. Finishing must be completed before formation of a plastic surface film.

4. **Placing, Finishing, and Curing Overlay.**

   a. **General.**

      At longitudinal construction joints, the surface course previously placed shall be sawn to a straight and vertical edge before the adjacent course is placed.

      After the machine finishing has been completed, hand finishing with a wood float may be required to produce a tight, uniform surface.

      Immediately after finishing, all vertical joints with adjacent concrete shall be sealed by painting with a thinned grout before the curing operation begins.

A drag shall be pulled over the surface in a longitudinal direction while the concrete is plastic. It shall be immediately followed with a transverse metal tine finish as specified in Section 602.03 B.2.a.

b. **Special Requirements for Low-Slump Concrete.**

Concrete for Class 1-H or 2-H removal areas may be placed in one operation.

Where full depth concrete is required, Class AAE-3 or low-slump concrete may be used. Concrete for the Class 3-H removal areas shall be struck off at the bottom level of Class 1-H unless the Class 3-H falls entirely within a Class 2-H removal area. In that case, the concrete shall match the prepared surface of the Class 2-H area. The concrete shall receive the wet cure specified in Section 602.03 F.3 for at least 72 hours, and shall be sandblasted and cleaned before overlaying.

The prepared deck surface shall be dry to permit absorption of the bonding grout. All vertical and horizontal surfaces shall receive a thorough, even coating of bonding grout at a controlled rate so the grout does not dry before covering with new concrete.

The concrete shall be screeded to a final grade and consolidated to 98% of the unit weight using ASSHTO T-121.

The surface shall receive a wet cure meeting Section 602.03 F.3 except that the curing period shall be 5 days. Concrete that is not wet cured within 30 minutes after placement shall be removed to the original prepared surface and replaced at the Contractor’s expense.

c. **Special Requirements for Latex-Modified Concrete.**

Where Class 2-H removal areas exist, Class AAE-3 concrete shall be used. The concrete shall be struck off at the bottom level of Class 1-H removal areas and left with a rough surface. After the concrete has been wet cured according to Section 602.03 F.3 for at least 72 hours, it shall be sandblasted and cleaned before overlaying.

The roadway surface shall be kept damp with water at least one hour before placing of new concrete. Puddles of free water shall be removed before covering with concrete.

The properly mixed latex composition shall be promptly delivered and deposited on the placement site and brushed onto the wetted, prepared surface. Care shall be exercised to ensure that all vertical and horizontal surfaces receive a thorough, even coating and that the rate of progress is controlled so the brushed material does not dry before covering with additional material as required for the final grade. The latex-modified concrete shall be struck off 1/4 inch above final grade, consolidated, an finished to final grade with vibrating screeders.

The surface shall receive a wet cure meeting Section 602.03 F.3 for at least 3 days. Concrete that is not wet cured within 30 minutes after placement shall be removed to the original prepared surface and replaced at the Contractor’s expense.

5. **Limitations of Operations.**

No preparation work will be allowed until the lane or strip is closed for traffic. This lane shall remain closed until the overlay has been completed.

No loads other than equipment needed to remove and replace concrete shall be permitted on the deck that has undergone preparation before placement and curing of concrete. Mixers shall not be operated on the structure. Equipment used for transporting concrete shall not damage the prepared deck surface and shall be designed for transporting concrete. Equipment shall not leak oil, hydraulic fluid, or any other contaminant onto the prepared deck surface. Equipment used to transport mortar or concrete shall be of sufficient size and adequate design to handle the volume of material without spilling or dripping.

Vehicular traffic shall not be permitted on the new overlay until the specified curing period is completed. If daily mean temperatures fall below 55°F. during the 5 days following concrete placement, additional curing days will be required.

When temperatures are above 80°F., placement shall be made at night or early morning hours by installing and operating necessary lighting. Rescheduling an overlay placement may be required if weather conditions have an adverse effect on the quality of the overlay.

Overlays shall not be placed unless the temperature is 45°F. and rising.

Bridge deck overlays shall not be placed after September 15 unless authorized by the Construction Engineer.

C. **METHOD OF MEASUREMENT.**

1. **Class 1-H, 2-H, and 3-H Removal.** The quantities of Class 1-H, Class 2-H, and Class 3-H Removal will be measured by the Square Yard. Removal of asphalt overlay will be incidental to this item.

2. **Overlay Concrete.** Overlay concrete will be measured by the Cubic Yard and will be based on the actual quantity used.

D. **BASIS OF PAYMENT.**

1. Quantities measured will be paid for at the Contract Unit Price for the pay items shown. Payment will be full compensation for all labor, equipment, and materials necessary to complete the work. When there is no item for Class 3-H Removal, payment will be made according to Section 104.03 D. Any Class 1-H or 2-H removal authorized before Class 3-H removal, shall be paid for at the unit bid prices.

2. **Overlay Concrete.** The quantity shown on the Plans will be paid for at the Contract Unit Price. Any overlay concrete in excess of that shown on the Plans shall be paid for at the rate specified in the Price Schedule (PS-1) in the Proposal Form. The provisions of Section 104.03 B will not be used to justify a change in Unit Price for the extra concrete.